U.S. Environmental Protection Agency Science Advisory Board
Executive Committee Panel on the Contaminated Sediments Science Plan
Roster

Steve Bay
Southern California Coastal Water Research Project
Steve Bay is Director of the Toxicology Department at the Southern California Coastal Water Research Project where his primary research focus is the relationship between sediment contamination and biological effects. His current research includes projects to assess and improve the performance of sediment Toxicity Identification Evaluation (TIE) methods and to use TIE methods in TMDL development in southern California bays and estuaries. Mr. Bay works closely with California environmental management agencies to develop methods for sediment quality assessment. Current activities in this area include a five-year project to develop sediment quality objectives for the California Water Resources Control Board and a multi-year effort to assist the San Diego Regional Water Quality Control Board in developing guidelines for sediment quality assessment and cleanup in San Diego Bay. As Special Studies Manager for the Los Angeles Basin Contaminated Sediments Task Force, Mr. Bay is coordinating several multi-year research projects related to the disposal and effects of contaminated dredge material and is also assisting state and federal agencies in developing a long-term strategy for the management of contaminated sediments in southern California. His research has contributed to the development and review of marine toxicity test methods for California regulatory programs, and standardization of west coast effluent test methods for the U.S. EPA. He participated in the Pellston workshops on porewater toxicity method and the use of sediment quality guidelines. Mr. Bay helped found the Southern California Toxicity Assessment Group, a professional organization dedicated to improving the use of toxicity tests. Mr. Bay's experience and training includes invertebrate taxonomy, field biology, animal culture, physiology, and radioisotope techniques. He received his M.S. in Biology from California State University in 1982.

Bohlen,Frank
University of Connecticut
W. FRANK BOHLEN is a professor with the Department of Marine Sciences at the University of Connecticut, Groton. His research has largely been applied coastal and stream processes studies examining factors such as sedimentary processes, sediment settling velocities, sediment transport systems, analysis of sediment transport systems and the relationship to PCB transfers, the effects of storms on sediment resuspension, time series observations of near-bottom suspended material concentrations, the impact of dredging on suspended material transport, and sediment capping of subaqueous dredged material disposal mounds.Dr. Bohlen was a member of the NAS/NRC Committee on Contaminated Marine Sediments, 1993-1998 and the Committee on Assessment of Risks from Remediation of PCB-Contaminated Sediments, 1999-2001.Dr. Bohlen is a member of the American Geophysical Union, Estuarine Research Federation, The Oceanography Society, and Marine Technology Society. He received his Ph.D. in 1969 from the Massachusetts Institute of Technology and Woods Hole Oceanographic Institution.

Chess,Caron
Rutgers University
Caron Chess is an Associate Professor, Department of Human Ecology, Rutgers University and Director of the Center for Environmental Communica-tion. She was previously the Founding Executive Director and later National Project Coordinator for the Delaware Valley Toxics Coalition (1981-1984). She has written extensively on topics of Risk Communication and Improving Public Participation in Solving Environmental Health Problems. She co-authored the publication Improving Dialogue: The Industry Risk Communication Manual, which was selected by the Society for Risk Analysis for the "Must Read" list for industry practitioners (1995). Dr. Chess was a member of the nominations committee for the Society for Risk Analysis (2001); member of the Communications Subcommittee of the Board of Scientific Counselors of the EPA, Office of Research and Development (2001); Invited participant, Workshop on Public Participation and Environmental Decision Making, National Research Council (2001); is a member of the Advisory Committee to Council of Society for Risk Analysis; was Panel Leader for Risk Communication at the World Health Organization International Seminar and Working Group Meeting on EMF, Risk Perception and Communication (1998); Chair for risk communication, Panel on Methyl Parathion, Agency for Toxic Substances and Disease Registry (1997); member, Committee on Risk Characterization, National Research Council (1994-1996); member, Governing Council, Society for Risk Analysis (1994-1996); member, EPA Science Advisory Board, Subcommittee on Valuation (1996-1997); and a member of the Editorial Boards of Human Ecology Review and Risk Analysis: An International Journal. Dr. Chess received her Ph.D. in Environmental Studies and Democratic Processes from State University of New York, College of Environmental Science and Forestry in 1997.

Cory-Slechta, Deborah
University of Rochester Medical School
Deborah Cory-Slechta began working as a junior staff fellow of the National Center for Toxicological Research beginning in 1979. She was appointed to the faculty of the University of Rochester Medical School in 1982 and rose through the ranks. In 1998, she was appointed Chair of the Department of Environmental Medicine and Director of the NIEHS Environmental Health Sciences Center at the University of Rochester. From July 2000- July 2002, she was appointed Dean for Research and Director of the Aab Institute for Biomedical Sciences, a newly established post at the University and as such, became the first female dean in the history of the Medical School. Dr. Cory-Slechta has served on numerous national research review and advisory panels, including committees of the National Institutes of Health, the National Institute of Environmental Health Sciences, the Food and Drug Administration, the National Center for Toxicological Research, the Environmental Protection Agency, the National Academy of Sciences, the Institute of Medicine, and the Agency for Toxic Substances and Disease Registry, Centers for Disease Control. In addition, Dr. Cory-Slechta has served on the editorial boards of several journals including Neurotoxicology, Toxicology, Toxicological Sciences, Fundamental and Applied Toxicology, Neurotoxicology and Teratology, and American Journal of Mental Retardation. She has held the elected positions of President of the Neurotoxicology Specialty Section of the Society of Toxicology, President of the Behavioral Toxicology Society, and been named a Fellow of the American Psychological Association. Her research has focused largely on environmental neurotoxicants as risk Factors for behavioral disorders and neurodegenerative disease. Specifically this has included work on the impact of lead on learning and attention and associated neurochemical mechanisms, and, more recently on the role of pesticides as risk factors for Parkinson's Disease. These research efforts have resulted in over 90 papers and book chapters to date. Dr. Cory-Slechta received her Ph.D. degree from the University of Minnesota in 1977.

Di Giulio,Richard
Duke University
Richard Thomas Di Giulio is a Professor with the Nicholas School of the Environment & Earth Sciences at Duke University and Director of the University's Superfund Basic Research Center. Dr. Di Giulio's research is focused upon biochemical and cellular responses of aquatic animals to environmental stressors, particularly contaminants. His laboratory is concerned with both basic studies of mechanisms of contaminant metabolism, adaptation and toxicity, and with the development of sensitive, mechanistically-based indices of exposure and toxicity that can be used in biomonitoring of free-living organisms. The long-term goal of this research is to bridge the gap between fundamental toxicological research and the development of mechanism-based approaches for monitoring environmental health. He seeks to utilize the comparative biology paradigm to elucidate linkages between human and ecosystem health. He has consulted extensively, including as a contractor in the development of the Monte Carlo uncertainty analysis for the surface water component for land disposal restrictions determinations for the EPA, and as a science advisor for ecological risk assessments of Superfund sites. Dr. Di Giulio served on the Board of Directors for the Society of environmental Toxicology and Chemistry (SETAC), and Chaired the Membership Committee. He was also a member of the SETAC 19th Annual Meeting Program Committee and Chair of the Plenary Session. He is also a member of the editorial boards of Toxicological Sciences, Human and Ecological Risk Assessment, and Chemosphere. He received his Ph.D., from Virginia Polytechnic Institute and State University in 1982.

Field,M. Jay
U.S. Department of Commerce
L. Jay Field Team Leader for Technical Support for Coastal Protection and Restoration Division, Office of Response and Restoration, National Oceanic and Atmospheric Administration (NOAA). Duties include providing technical support to NOAA Coastal Resource Coordinators and U.S. Environmental Protection Agency (EPA) in the evaluation of ecological risk to freshwater and coastal marine resources resulting from releases of contaminants at hazardous waste sites. Recent work has included conducting and evaluating aquatic ecological risk assessments at Superfund sites and the evaluating and developing sediment guidelines. He served on the technical advisory committees for EPA for the Remedial Investigation of the Hudson River PCBs Superfund site, the National Sediment Inventory methodology evaluation, and the Great Lakes National Program Office guidance manual to support the assessment of contaminated sediments in the Great Lakes. Recent publication titles include: Predicting amphipod toxicity from sediment chemistry using logistic regression models; Application of a sum_PAH model and logistic regression model to sediment toxicity data based on a species-specific water-only LC50 toxic unit for Hyalella azteca; Predictions of sediment toxicity using consensus-based freshwater sediment quality guidelines; Development and evaluation of consensus-based sediment effect concentrations for polychlorinated biphenyls; and Development of a framework for evaluating numerical sediment quality targets and sediment contamination in the St. Louis River Area of Concern. Mr. Field received his M.S. in Fisheries Biology from the University of Washington School of Fisheries in 1984.

McFarland,Michael J.
Utah State University
Dr. Michael J. McFarland received his bachelors' degree in Engineering and Applied Science from Yale University, his masters' degree in Chemical Engineering from Cornell University and his Ph.D. in Agricultural Engineering from Cornell University. Dr. McFarland is currently an associate professor in the Department of Civil and Environmental Engineering at Utah State University where his research interests are focused in the areas of air quality management, industrial waste management and pollution prevention. Dr. McFarland has served on numerous federal, state and local environmental engineering and public health advisory committees for the US Dept. of Defense, US Environmental Protection Agency, US Dept. of Energy, National Science Foundation, Utah Dept. of Environmental Quality and Cache County, Utah. Dr. McFarland has authored or coauthored over fifty publications in the field of environmental engineering including engineering textbooks, workbooks, journal articles and conference proceedings. Dr. McFarland is a registered professional engineer in the State of Utah and currently holds Grade IV operator certifications for both wastewater and water treatment. Dr. McFarland is a member of the American Academy of Environmental Engineers (AAEE), the Water Environment Federation (WEF), the Society for Risk Analysis, National Biosolids Partnership and the Association of Environmental Engineering and Science Professors (AEESP).

Pfaender,Fredrick
University of North Carolina at Chapel Hill
Frederick K. Pfaender is a Professor of Environmental Sciences and Engineering at the University of North Carolina at Chapel Hill, with a Joint appointment as Director of Ecology for the Carolina Federation of Environmental Programs. Dr. Pfaender's research is concerned with microbially mediated transformations of xenobiotic chemicals in soil, marine and subsurface environments. The primary focus is on identification of the environmental factors that regulate microbial activities Other interests include microbial ecology, nutrient exchanges in rivers and estuaries, estuarine pollution; biodegradation of petroleum hydrocarbons by patuxent aquifer microbial communities; and biodegradation of detergent chemicals in estuarine and near-shore marine environments. Dr. Pfaender has published on his research in the areas of adaptation of aquifer microbial communities to the biodegradation of xenobiotic compounds: influence of substrate concentration and preexposure; a comparison of microbial community characteristics among petroleum-contaminated and uncontaminated subsurface soil samples; the effect of inorganic and organic supplements on the microbial degradation of phenanthrene and pyrine in soils; and polynuclear aromatic hydrocarbon metabolism in soils: relationship to soil characteristics and preexposure. Dr. Pfaender received his PhD in Microbiology from Cornell University in 1971.

Splitstone,Douglas
Spiltstone and Associates
Douglas E. Splitstone is Principal of Splitstone & Associates. He has designed data collection programs to investigate potential environmental impacts in air, water, and soil. Mr. Splitstone has conducted statistical analyses of data related to the extent of site contamination and remedial planning, industrial wastewater discharges, and the dispersion of airborne contaminants. Mr. Splitstone has also developed statistical decision criteria for evaluating when acceptable environmental cleanup levels have been achieved. He has successfully employed geostatistical analysis and estimation techniques for mapping the areal extent and total volume of dioxin contaminated soils at the site of a former New Jersey pesticide plant. He has also

successfully employed these techniques to map the extent of contamination in the sediments of the Passaic River and design the sampling plan for the collection of data to assess the extent of possible contamination by radioactive material in the environs of Department of Energy's (DOE's) Feed Materials Production Center near Fernald, Ohio. He has served as a member of the Task Group on Epidemiology and Statistical Methodology for the USEPA's Center for Environmental Epidemiology at the University of Pittsburgh's Graduate School of Public Health; and previously consulted with Science Advisory Board's Air Toxics Monitoring Subcommittee, and panels on Quality Management and Secondary Data Use. Mr. Splitstone is a member of the American Statistical Association (ASA) and is a founder and past chairman of that organization's Committee on Statistics and the Environment. He was awarded the Distinguished Achievement Medal by the ASA's Section on Statistics and the Environment in 1993. He was chairman for the Sixth Symposium on Statistics and the Environment that was held at the National Academy of Sciences Mr. Splitstone received his M.S. in Mathematical Statistics from Iowa State University in 1967.

Theis,Thomas
University of Illinois at Chicago
Dr. Theis is the founding director of the Institute for Environmental Science and Policy at the University of Illinois at Chicago. Formerly, Theis was the Bayard D. Clarkson Distinguished Professor and Director of the Center for Environmental Management at Clarkson University. Professor Theis' areas of expertise include the mathematical modeling and systems analysis of environmental processes, the environmental chemistry of trace organic and inorganic substances, interfacial reactions, subsurface contaminant transport, and hazardous waste management. He has been principal or co-principal investigator on over forty funded research projects totaling in excess of six million dollars, and has authored or co-authored over eighty papers in peer review research journals, books, and reports. He is a member of the USEPA Science Advisory Board (Environmental Engineering Committee), is past editor of the Journal of Environmental Engineering, and serves on the editorial boards of The Journal of Contaminant Transport, and Issues in Environmental Science and Technology. He has served on numerous professional committees including the Scientific Committee on Problems in the Environment (SCOPE), and the World Bank funded team of scholars for advising the Universidad Nacional Del Litoral (Argentina) on environmental engineering education. From 1980-1985 he was the codirector of the Industrial Waste Elimination Research Center (a collaboration of Illinois Institute of Technology and University of Notre Dame), one of the first Centers of Excellence established by the USEPA, and was Principal Investigator on the NSF-Sponsored Environmental Manufacturing Management Program at Clarkson.

Windom,Herbert L.
Skidaway Institute of Oceanography
Herbert L. Windom is Professor/Emeritus at the Skidaway Institute of Oceanography. Research Interests include: Riverine, estuarine and continental shelf and slope geochemical processes; land-sea transport; trace metal biogeochemistry, marine, estuarine and coastal environmental quality; and estuarine and coastal marine pollution. Recent Publications include: Sediment manganese and biogenic silica as geochemical indicators in estuarine salt marshes of coastal Georgia; and General Guidelines for using the Sediment Quality Triad. He served on the Science Advisory Board Subcommittee of Sediment Quality Criteria; was a consultant to the UNEP GEMS/WATER GEF Proposal Development (Rapid Assessment of Freshwater Resources in International River Basins as a Framework for the Promotion of Environmentally Sound River

Basin Management; a member of the Group of Experts on Methods, Standards, and Intercalibration (GEMSI) of the Intergovernmental Oceanographic Commission (IOC) of UNESCO; and a member of NSF Advisory Panel on Biogeochemistryand Environmental Chemistry (1995); and Chairman, GEMS/Water Expert Consultation on the Assessment of Land-Based Sources of Pollution (1995). Dr. Windom received his Ph..D. in Marine Geochemistry from the University of California, San Diego, in 1968.